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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,341	04/21/2006	Martin Graham Partridge	JMYS-130US	1574
23122	7590	01/02/2008	EXAMINER	
RATNERPRESTIA			TESKIN, FRED M	
P O BOX 980			ART UNIT	PAPER NUMBER
VALLEY FORGE, PA 19482-0980			1796	
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			01/02/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/538,341	Applicant(s) PARTRIDGE ET AL.	
	Examiner Fred M. Teskin	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-28 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6,9,10,12,13,15,18,19,21,24,26 and 28 is/are rejected.
- 7) ☒ Claim(s) 1,2,5,7,9-11,14,16,17,20,22,23,25 and 27 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>20050610</u> . | 6) <input type="checkbox"/> Other: ____. |

With entry of the preliminary amendment of June 10, 2005, claims 1-7 and 9-28 are currently pending and under examination.

Claims 1, 9 and 10 are objected to because of the following informalities:

Re claim 1, subparagraph (ii): the second occurrence of "the" should be deleted as redundant and the term "amioalkyl" is misspelled.

Re claims 9 and 10, subparagraph (ii) of each: the terms "hydroxyalklyl" and "amioalkyl" are misspelled and the recitation "list comprising ..." is improper Markush language. The language "selected from the group consisting of ..." is proper; see MPEP § 2173.05(h)(I).

Appropriate correction is required.

Claims 6, 15 and 21 are objected to because of the following informalities: each claim contains an internal period (after first occurrence of "5") and fails to conclude with a period. Appropriate correction is required.

Claims 3, 4, 6, 12, 13, 15, 18, 19, 21, 24, 26 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claims 3, 12 and 18 (and claims dependent thereon): the phrase "such as" renders the claims indefinite because it is unclear whether the limitation following the phrase (i.e., "quinolyl") is part of the claimed invention. See MPEP § 2173.05(d).

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Claims 6, 15 and 21 are incomplete, hence indefinite, due to lack of definition for variables "X" and "Y" of Formula 5. Note that since claims 6, 15 and 21 each depend *directly* from an independent claim, they cannot be read to include definitions of such variables as recited in other dependent claims (i.e., claims 3, 12 and 18). Clarification and appropriate correction are required.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6191250 ("Aida").

Ring-opening polymerization of cyclic compounds such as lactone and/or cyclic carbonate monomer(s) using a catalyst formed by reacting species of applicants'

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compound (i) and complexing compound (ii) is described by Aida. Thus, specific disclosure is provided to reacting Lewis acids such as titanium tetrachloride or titanium (IV) isopropoxide with phenols substituted with various alkyl groups, and using the reaction products to catalyze ring-opening polymerization of the requisite cyclic compound: see col. 4, lines 25-47; col. 10, lines 46-55; Preparation Examples 1-3 and Examples II-1 through II-5 (in cols. 17-22). As such, Aida is seen to describe the preparation of a catalyst by reacting species of applicants' titanium compound and substituted phenol as claimed, combining the catalyst with a lactone monomer, a cyclic carbonate monomer or a mixture thereof, and preparing polymer via a ring-opening polymerization reaction of such monomer(s) in accordance with the present invention. The description in a reference of even a single embodiment of broadly claimed subject matter constitutes a description of the invention for anticipation purposes. *In re Luckach*, 169 USPQ 795 (CCPA 1971).

Claims 1, 9 and 10 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 2002/0227861 ("Wang").

Wang discloses the polymerization of macrocyclic oligoester using an aryl titanate catalyst comprising the reaction product of tetra-isopropyl titanate (corresponding to applicants' titanium alkoxide (i)) and phenols substituted with specific alkyl and amino groups (corresponding to applicants' complexing compound (ii)), see Tables 1 and 2 and Examples 1-10. As the macrocyclic oligoester comprises ether linkages in its structural repeat unit (see Wang paragraph 0009), this polyester

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precursor is seen to qualify as a "cyclic ether" within claims 1, 9 and 10, and is polymerized in the presence of catalysts made from species of claimed reactants (i) and (ii). Thus, while not explicitly disclosed in Wang, a "ring-opening" polymerization reaction is reasonably presumed inherent, based on the identity of reactants and polymerization catalyst as between the disclosed and claimed processes. In other words, as the reactant compound as well as the polymerization catalyst of Wang may be the same as applicants', there is a plausible basis for inferring an identical reaction inevitably occurs in the cited examples. Where a reference discloses all the limitations of a claim except for a property or function, and examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention, basis exists for shifting the burden of proof to applicant. See, *In re Fitzgerald et al*, 205 USPQ 594, 596 (CCPA 1980) and MPEP 2112-2112.02.

Claims 2, 5, 7, 11, 14, 16, 17, 20, 22, 23 25 and 27 are objected to as being dependent on a rejected base claim but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claim. Claims 3, 4, 6, 12, 13, 15, 18, 19, 21, 24, 26 and 28 would be allowable if amended or rewritten to overcome the rejection under 35 U.S.C. 112 set forth in this Office action and to include all the limitations of the base claim and any intervening claim.

Any inquiry concerning this communication should be directed to Examiner F. M. Teskin whose telephone number is (571) 272-1116. The examiner can normally be

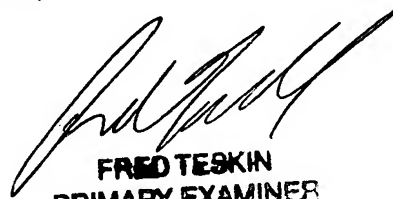
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reached on Monday through Thursday from 7:00 AM - 4:30 PM, and can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on (571) 272-1114. The appropriate fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FMTeskin/12-29-07



FRED TESKIN
PRIMARY EXAMINER
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